

Remarks:

Reconsideration of the application is requested.

Claims 1-20 remain in the application. Claims 1, 14, and 18 have been amended.

In item 2 on page 2 of the above-identified Office action, the Examiner stated that DE 196 22 720 cited in the IDS has not been considered. A supplemental IDS citing a corresponding US Patent, US 6,020,827, and a copy thereof, is enclosed. Also enclosed is an English Language abstract of EP 0 440 974 cited in the IDS.

In item 4 on page 3 of the Office action, claims 1-6, 8, 9, 11, 12, and 14-20 have been rejected as being anticipated by *Shober* (US 5,952,922) under 35 U.S.C. § 102.

In item 5 on page 5 of the Office action, claims 1-2 and 12-13 have been rejected as being anticipated by *Schuermann* (US 5,552,789) (thereinafter *Schuermann* '789) under 35 U.S.C. § 102.

In item 6 on page 5 of the Office action, claims 1, 6, 7, 9, and 10 have been rejected as being anticipated by *Schuermann*

(US 5,347,280) (thereinafter *Schuermann '280*) under 35 U.S.C. § 102.

The above-noted rejections have been considered and claim 1 has been amended to recite certain features recited somewhat similarly in claims 3 and 14. Since claims 3 and 14 have not been rejected by either *Schuermann '789* or *Schuermann '280*, the rejections in item 5 and 6 of claim 1 are therefore believed to have been overcome. Claim 14 has also been amended in a similar fashion as claim 1.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 (similarly claim 14) as amended calls for, inter alia:

a transmitting and receiving station configured to transmit an interrogation code signal; and

a plurality of transponders each configured to respond to the interrogation code signal upon receiving the interrogation code signal by generating and ***simultaneously transmitting in temporal synchronization*** a response signal to said transmitting and receiving station.

In item 4 on page 3 of the Office action, the Examiner stated that "Shober's monitoring system comprises: ... transponders

configured to simultaneously generate and transmit a response signal to the interrogator upon receipt of the interrogation code signal. (See Col. 2, lines 2-6 and Col. 15, lines 50-60.)"

*Shober* is concerned with an in-building modulated backscatter system using tags and an interrogator for receiving and demodulating the reflected modulated signals from the tags. The interrogator can determine the identity of the tags in the reading field, and can exchange data with those tags that have been identified.

Regarding synchronization *Shober* contains the following disclosure:

"The Information Signal 200a is then amplified, by Amplifier 303, and synchronization recovered in Clock Recovery Circuit 304." (Col.4, lines 18-19).

"Typically, a pattern of synchronization bits is transmitted at the beginning of the Downlink message; these bits allow the Tag to acquire bit and message synchronization; enabling the Tag to determine the beginning and the end of the Downlink message." (Col. 7, lines 25-29).

"First a series of Sync (1210) bits could be sent; this would enable the Tag to synchronize to the timing of the Interrogator." (col. 13, lines 52-54).

Clearly, *Shober* does not show transponders each configured to ***simultaneously transmit in temporal synchronization*** a response signal, as recited in claims 1 and 14 of the instant

application. Therefore, the invention as recited in claims 1 and 14 of the instant application is believed not to be anticipated by *Shober*.

The inventive concept of the invention of the instant application is to synchronize the transponders such that the transponders transmit in a synchronized manner. This ensures that all of the transponders transmit exactly with the same timing rhythm, so that, at the reception end, no signal collision occurs, rather there is merely an increase in the received field strength in an advantageous manner (first paragraph on page 5 of the instant application).

It is accordingly believed to be clear that neither *Shober*, *Schuermann '789*, nor *Schuermann '280* show the features of claims 1 and 14. Claims 1 and 14 are, therefore, believed to be patentable over the art and because claims 2-13 and 15-20 are ultimately dependent on claims 1 and 14, respectively, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-20 are solicited.

If an extension of time is required, petition for extension is herewith made. The extension fee for response within a period

of one month pursuant to Section 1.136(a) in the amount of \$  
110.00 in accordance with Section 1.17 is enclosed herewith.

Please charge any other fees which might be due with respect  
to Sections 1.16 and 1.17 to the Deposit Account of Lerner and  
Greenberg, P.A., No. 12-1099.

Respectfully submitted,

  
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For Applicants

Markus Nollf  
Reg. No. 37,006

MN:cgm

April 11, 2003

Lerner and Greenberg, P.A.  
Post Office Box 2480  
Hollywood, FL 33022-2480  
Tel: (954) 925-1100  
Fax: (954) 925-1101

Version with markings to show changes made:

Claim 1 (amended). A functional monitoring system,  
comprising:

a transmitting and receiving station configured to transmit an  
interrogation code signal; and

a plurality of transponders each configured to respond to the  
interrogation code signal upon receiving the interrogation  
code signal [and to generate a response signal and transmit  
the] by generating and simultaneously transmitting in temporal  
synchronization a response signal to said transmitting and  
receiving station.

Claim 14 (amended). A method of operating a functional  
monitoring system having a transmitting and receiving station  
and a plurality of transponders, the method which comprises:

transmitting an interrogation code signal with a transmitting  
and receiving station; and

simultaneously, in temporal synchronization, responding with  
each of a plurality of transponders receiving the  
interrogation code signal by transmitting a response signal.

Claim 18 (amended). The method according to claim 14, which comprises synchronizing the transponders for transmitting the response signal in synchronization.